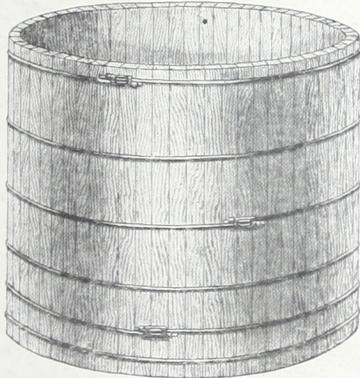


26-4.

KALAMAZOO TANKS

AND

STEEL STRUCTURES



KALAMAZOO TANK & SILO CO.
KALAMAZOO, MICHIGAN

Organized 1867

Incorporated 1889

KALAMAZOO

Tanks—Vats—Structures

and

Accessories

**Fifty years experience in making Tanks of the best
grade of lumber and workmanship**

1917

KALAMAZOO TANK & SILO CO.
KALAMAZOO, MICHIGAN

ID 89-89862 TCE

AUG 4 1924

IT must be apparent that a company manufacturing Tanks for fifty years has learned the art from actual experience and enables us to serve our trade with a line of Tanks that are the product of expert workmanship and the choicest grades of material. This means durability and service, and brings many repeat orders each year and which always means a satisfied customer.

Our yards at all times contain a large stock of the best grades of Tank lumber with a good assortment of lengths, widths, etc., which enable us to give our trade the service they demand. Your attention is called to four of the woods most commonly used in Tank building as shown below:—

Louisiana Red Cypress has for years been recognized as an excellent Tank lumber and carries that element of durability which makes it desirable for all general purpose Tanks. Can be furnished absolutely clear of knots.

Washington Fir—this is the old growth yellow fir which is a soft fine grained lumber which can be furnished in almost any length. This material is rapidly gaining an enviable reputation as a Tank lumber and is being specified by some of the most exacting concerns in the country.

White Pine—this is the old Michigan Cork Pine and has a reputation that was established years ago, which will always keep up the demand. This stock can be furnished in a sound red knotted grade and is used in great quantities by the Pickle manufacturers for salting Tanks, also by Tanning companies and others who use a great number of Tanks.

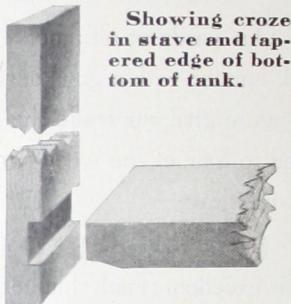
Yellow Pine is in great demand by the Sulphite, Pulp and Paper Mills, as it can be had in any thickness, width or length, and carries a pitch which successfully resists the acids with which it comes in contact. This material is carried by us only in the long leaf variety and a grade that is 90% heart stock, such as demanded by the mill architects.

If You Want the Best—We Have It.

List Prices, Round Tanks

Cypress, White Pine, Long Leaf, Yellow Pine and Fir

Discount from the List



Showing croze
in stave and tapered edge of bottom of tank.

2" stock dresses to about 1 3/4"
3" " " " " 2 3/4"
Distance from croze to bottom of stave
approximately same as thickness of bottom.

Following table gives diameter of bottom and length of staves. Inside diameter of tank about 1 1/2" less than diameter of bottom.

2" Stock Before Being Machined

Capacity in Gallons	Diameter of Bottom ft. in.	Length of Stave ft. in.	No. of Hoops	Approximate Shipping Weight.			List Price F. O. B. Kalamazoo
				2 inch. Cypress	2 inch White Pine	2 inch Yellow Pine	
115	3' 0"	3' 0"	3	207	187	273	\$ 14.30
135	3' 0"	3' 6"	3	232	210	307	16.00
155	3' 6"	3' 0"	3	242	218	320	16.50
193	3' 6"	3' 6"	3	270	243	356	18.50
200	4' 0"	3' 0"	3	285	256	376	19.50
235	4' 0"	3' 6"	3	318	286	418	21.70
270	4' 0"	4' 0"	4	352	318	465	24.00
306	4' 0"	4' 6"	4	388	350	512	26.20
350	4' 6"	3' 6"	3	365	330	482	25.00
410	4' 6"	4' 0"	4	405	365	535	27.70
470	4' 6"	4' 6"	4	440	395	580	30.00
525	4' 6"	5' 0"	5	478	430	630	32.50
580	4' 6"	5' 6"	5	517	465	682	35.00
500	5' 0"	4' 0"	4	460	415	607	29.90
585	5' 0"	4' 6"	4	500	450	660	32.60
650	5' 0"	5' 0"	5	543	490	715	35.20
725	5' 0"	5' 6"	5	583	525	769	37.90
795	5' 0"	6' 0"	6	625	560	825	40.00
935	6' 0"	5' 0"	5	680	613	890	42.00
1040	6' 0"	5' 6"	5	730	657	964	45.30
1150	6' 0"	6' 0"	6	780	703	1030	48.60

List Prices, Round Tanks (Continued)

2" Stock Before Being Machined

Capacity in Gallons	Diameter of Bottom ft. in.	Length of Stave ft. in.	No. of Hoops	Approximate Shipping Weight			List Price F. O. B. Kalamazoo
				2 inch Cypress	2 inch White Pine	2 inch Yellow Pine	
1255	6' 0"	6' 6"	6	830	745	1095	51.90
1360	6' 0"	7' 0"	7	880	793	1160	54.20
1570	6' 0"	8' 0"	8	980	880	1290	60.80
1100	6' 6"	5' 0"	5	750	675	990	46.40
1345	6' 6"	6' 0"	6	855	770	1130	52.60
1590	6' 6"	7' 0"	7	963	865	1270	59.30
1840	6' 6"	8' 0"	8	1070	965	1410	65.75
2090	6' 6"	10' 0"	10	1280	1165	1690	80.00
1470	7' 0"	5' 0"	5	820	740	1080	50.50
1660	7' 0"	6' 0"	6	935	845	1235	57.80
1850	7' 0"	7' 0"	7	1050	945	1385	65.00
2140	7' 0"	8' 0"	8	1165	1050	1540	72.40
2330	7' 0"	9' 0"	7	1280	1150	1690	79.70
2520	7' 0"	10' 0"	10	1390	1260	1840	87.00
2030	8' 0"	6' 0"	6	1105	995	1460	68.80
2400	8' 0"	7' 0"	7	1236	1115	1635	77.20
2780	8' 0"	8' 0"	8	1370	1235	1810	85.60
3150	8' 0"	9' 0"	9	1500	1350	1980	94.00
3530	8' 0"	10' 0"	10	1635	1470	2150	102.40
3900	8' 0"	11' 0"	11	1775	1600	2340	110.80
4280	8' 0"	12' 0"	12	1900	1710	2510	119.20
3150	8' 6"	8' 0"	8	1470	1325	1940	90.70
3570	8' 6"	9' 0"	7	1610	1450	2120	99.40
3700	8' 6"	10' 0"	10	1750	1575	2310	108.00
4270	8' 6"	11' 0"	11	1890	1700	2500	116.80
4840	8' 6"	12' 0"	12	2025	1820	2680	125.50
2650	9' 0"	6' 0"	6	1285	1150	1690	79.50
3130	9' 0"	7' 0"	7	1430	1290	1890	88.70
3600	9' 0"	8' 0"	8	1580	1420	2090	98.20
4080	9' 0"	9' 0"	9	1730	1560	2290	107.70
4560	9' 0"	10' 0"	10	1880	1700	2480	117.20
5520	9' 0"	12' 0"	12	2180	1960	2880	136.20
6480	9' 0"	14' 0"	14	2500	2250	3300	156.00
3231	10' 0"	6' 0"	6	1480	1340	1950	92.00
3820	10' 0"	7' 0"	7	1640	1480	2165	103.00
4406	10' 0"	8' 0"	8	1800	1630	2380	112.50
4994	10' 0"	9' 0"	9	1970	1780	2600	122.00
5580	10' 0"	10' 0"	10	2130	1920	2810	131.50
6755	10' 0"	12' 0"	12	2460	2220	3250	151.00
7930	10' 0"	14' 0"	14	2800	2560	3680	171.00
6344	12' 0"	8' 0"	8	2280	2050	3000	142.00
7180	12' 0"	9' 0"	9	2500	2250	3300	154.00
8026	12' 0"	10' 0"	10	2680	2410	3530	167.00
9728	12' 0"	12' 0"	12	3020	2730	4000	193.00
11420	12' 0"	14' 0"	14	3370	3040	4450	219.00
8720	12' 6"	10' 0"	10	3100	2800	4100	179.00
10557	12' 6"	12' 0"	12	3400	3070	4480	211.00
12393	12' 6"	14' 0"	14	3700	3340	4880	243.00
10940	14' 0"	10' 0"	10	3250	2930	4300	201.00
13240	14' 0"	12' 0"	12	3700	3330	4880	230.00
15545	14' 0"	14' 0"	14	4150	3750	5475	260.00
16696	14' 0"	16' 0"	16	4600	4150	6070	290.00

List Prices, Round Tanks (Continued)

3" Stock Before Being Machined

Following Prices on 3 Inch Stock.

Capacity in Gallons	Diameter of Bottom ft. in.	Length of Stave ft. in.	No. of Hoops	Approximate Shipping Weight			List Price F. O. B. Kalamazoo
				Cypress	White Pine	Yellow Pine	
10940	14' 0"	10' 0"	10	5200	4900	6800	\$ 336.00
13240	14' 0"	12' 0"	12	6100	5850	7850	394.00
15545	14' 0"	14' 0"	14	6900	6250	8900	447.00
16696	14' 0"	16' 0"	16	7800	6950	10000	515.00
17847	14' 0"	18' 0"	18	8800	7700	11100	575.00
20300	16' 0"	14' 0"	14	8250	7400	10600	540.00
23310	16' 0"	16' 0"	16	9300	8150	12000	515.00
26320	16' 0"	18' 0"	18	10400	9000	13250	680.00
29330	16' 0"	20' 0"	20	11500	9700	14650	745.00
25535	18' 0"	14' 0"	14	9600	8550	12350	610.00
29340	18' 0"	16' 0"	16	10850	9400	13900	690.00
33147	18' 0"	18' 0"	18	12100	10300	15400	800.00
36950	18' 0"	20' 0"	20	13800	11200	17400	950.00
36230	20' 0"	16' 0"	14	12450	11800	15900	835.00
40920	20' 0"	18' 0"	18	14000	11700	17700	930.00
45630	20' 0"	20' 0"	20	15600	12700	19600	1080.00
50340	20' 0"	22' 0"	22	17200	13700	21400	1200.00
55050	20' 0"	24' 0"	24	18800	14700	23300	1300.00
43838	22' 0"	16' 0"	16	14300	13700	18200	950.00
49526	22' 0"	18' 0"	18	16000	15000	20200	1110.00
55210	22' 0"	20' 0"	20	17800	16100	22400	1250.00
60900	22' 0"	22' 0"	22	19500	17300	24600	1440.00
52170	24' 0"	16' 0"	16	16200	15200	20500	1100.00
58940	24' 0"	18' 0"	18	18000	16500	22800	1250.00
65706	24' 0"	20' 0"	20	20100	18000	25200	1440.00
72474	24' 0"	22' 0"	22	22200	19200	27600	1600.00
75515	26' 0"	18' 0"	18	22300	18300	27000	1560.00
84188	26' 0"	20' 0"	20	24000	19800	29100	1740.00
92860	26' 0"	22' 0"	22	25700	21200	31100	1925.00
101532	26' 0"	24' 0"	24	27400	22500	33200	2110.00
92090	30' 0"	18' 0"	18	25000	22100	31200	1900.00
102670	30' 0"	20' 0"	20	28000	24000	34600	2060.00
123820	30' 0"	24' 0"	24	33700	27000	41400	2600.00

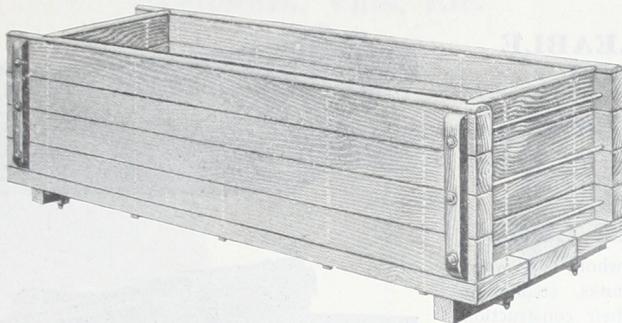
The above sizes represent the tanks most commonly used. We can, however, make up tanks of any size or specifications to fit individual uses.

All tanks are strongly hooped with round iron hoops with malleable iron draw lugs. Long threads provided on hoops for ample "take up" in hoops, as well as for easier erection in first putting on hoops.

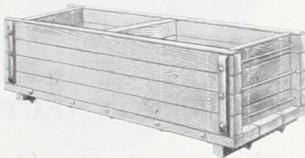
Rectangular Tanks, Vats, Etc.

Any size or shape, with or without partitions or outside braces.

All rectangular tanks outside measurement unless otherwise specified.



Note the vertical bolts are countersunk and a maple strip fitted over the top edge, giving a smooth and finished tank.



Showing tank divided by partitions into compartments.



Outside brace for long tanks where rods cannot be used across tank.

The following table is given for convenience in figuring the number of gallons in any size rectangular tank. Pick out the length and width tank you want and multiply the gallons shown by the number of feet deep your tank is to be.

Capacity U. S. Gallons in Rectangular Tanks

For One Foot in Depth

Width of Tank	Length of Tank																				
	2 ft. in.	2 ft. 6 in.	3 ft. 6 in.	4 ft.	4 ft. 6 in.	5 ft.	5 ft. 6 in.	6 ft.	6 ft. 6 in.	7 ft.	7 ft. 6 in.	8 ft.	8 ft. 6 in.	9 ft. 6 in.	10 ft. 6 in.	11 ft. 6 in.	12 ft.				
2 ft.	29	37	44	52	59	67	74	82	89	97	104	112	119	127	134	142	149	157	164	172	179
2 ft. 6 in.		46	56	65	74	84	93	102	112	121	130	140	149	158	168	177	187	196	205	215	224
3 ft.			67	78	89	100	112	123	134	145	157	168	179	190	202	213	224	235	246	258	269
3 ft. 6 in.				91	104	117	130	144	157	170	183	196	209	222	235	248	261	274	288	301	314
4 ft.					119	134	149	164	179	194	209	224	239	254	269	284	299	314	329	344	359
4 ft. 6 in.						151	168	185	201	218	235	252	269	286	302	319	336	353	370	387	403
5 ft.							187	205	224	243	261	280	299	317	336	355	374	392	411	430	448
5 ft. 6 in.								226	246	267	288	308	329	349	370	390	411	432	452	473	493
6 ft.									269	291	314	336	359	381	403	426	448	471	493	516	538
6 ft. 6 in.										316	340	364	388	413	437	461	486	510	534	559	583
7 ft.											366	392	418	445	471	497	523	549	575	602	628
7 ft. 6 in.												420	448	476	504	532	561	589	617	645	673
8 ft.													478	508	538	568	598	628	658	688	718

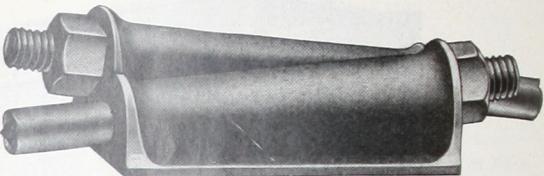
Hoops, Lugs, Overflow Pipes, Etc.

Hoops curved to circle of Tank, long threads and Malleable Iron draw lugs.

MALLEABLE LUGS

$\frac{1}{2}$ to $1\frac{1}{4}$ inches.

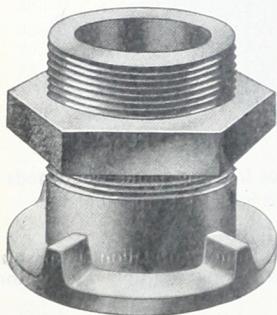
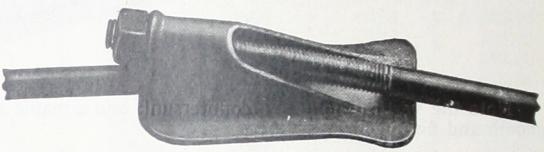
Hoops rolled and fitted for any size Tank or Cylinder.



SADDLE LUGS

Used almost wholly on wood pipe, spray Tanks, smoke, or vapor tubes; their construction giving a straight pull, avoiding all tortional strain.

Sizes, 7-16, $\frac{1}{2}$, $\frac{5}{8}$, and $\frac{3}{4}$ inch.

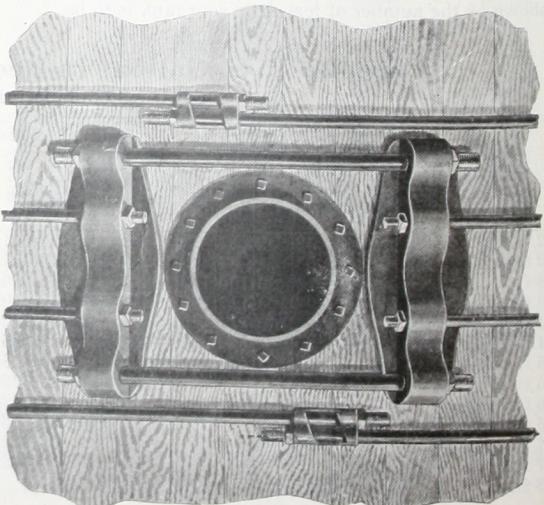


CASTING FOR CARRYING HOOPAGE PAST OPENINGS IN TANKS

We have supplied these for a good many Blow Pits, in paper mill construction.

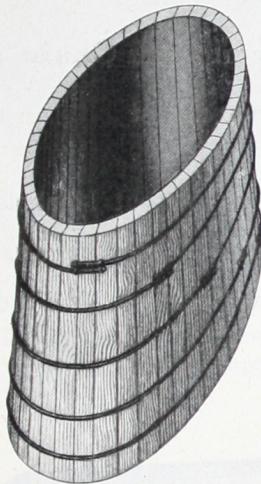
IRON OVERFLOW CONNECTION

Threaded for $1\frac{1}{2}$ inch pipe on inside and 2 inch pipe on outside.

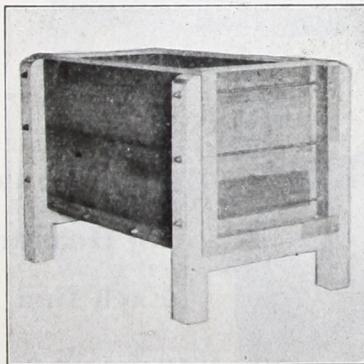


SPECIAL TANKS

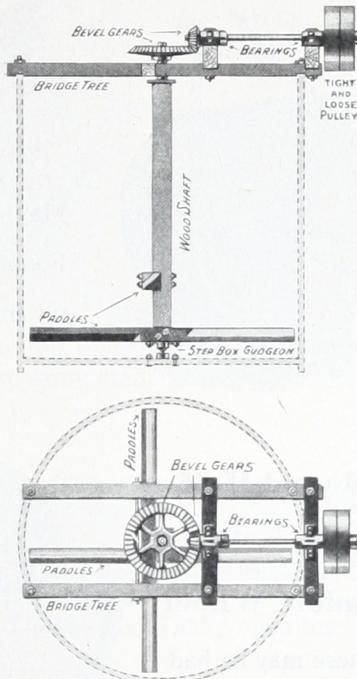
Agitators, Vats, Etc.



Elliptical Tanks any size or shape.



Enameling Vats, griges extended to make the legs or stand for the vat.



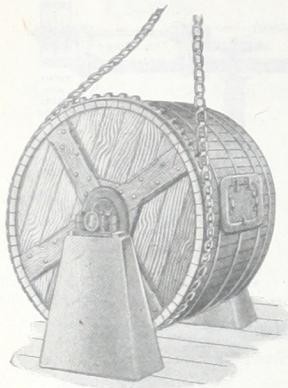
STIRRING DEVICES OR AGITATORS.

Thoroughly and strongly made of Yellow Pine, cross timbers, post and stirrer arms. Fitted up complete, bevel gears, shafting, bearings, light and loose pulleys, stepbox and gudgeon.

All holes bored, ready to fasten to tank, and bolts for fastening always included. Brass or bronze stepbox and gudgeon, as well as bolts for fastening stirring arms may be had where contents of tank will not allow the use of water.

TANNER'S SUPPLIES

DRUMS, VATS AND TANKS

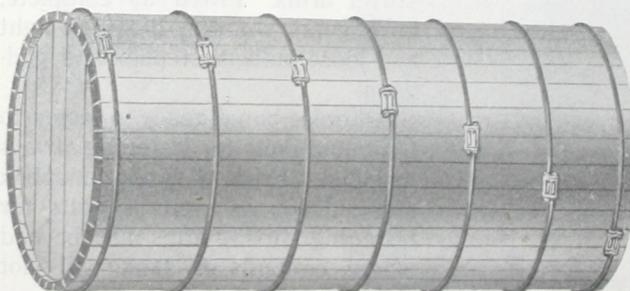
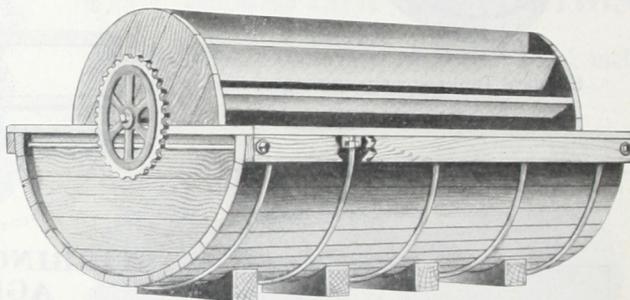


Drums Driven with Chain and Sprocket

May be had with or without Manhole. Our Foundry and Galvanizing Plant enables us to supply iron standards and bearings also, if desired.

Round Half Vat with Paddle Wheel

These may be had with or without the Paddle Wheel.

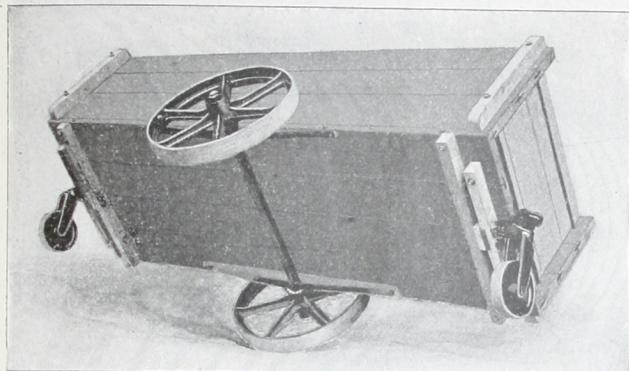


Round Tanks with Head in Each End

May be had also with Manhole.

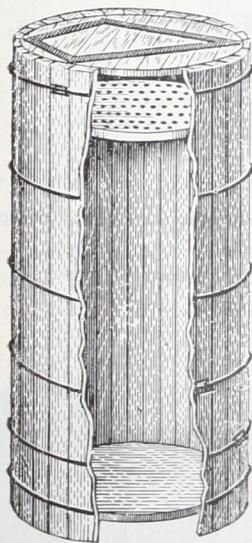
Soaking Vat Trucks

Movable Tanks



heads being countersunk and plugged on top edge of vat. Oak grips at ends. Turns in its own length. Balls are same grade as used in a bicycle.

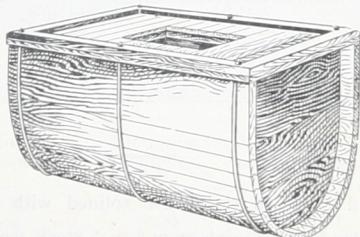
Eight feet long outside, $2\frac{1}{2}$ feet wide inside, 1 foot 10 inches deep inside. Main wheel 26 inches diameter, 3 inch tread; caster wheels 8 inches diameter; axle $1\frac{1}{2}$ inch square. Ends, sides and bottom are tongued and grooved, also rodded, the



Vinegar Generator with inside false floor or distributor perforated with tapered holes.

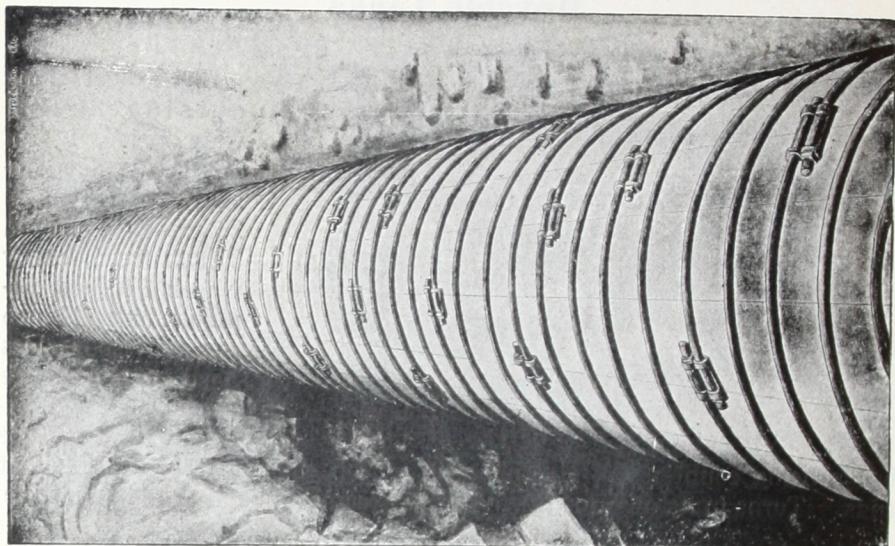


Half Round Tank, open top with brace.

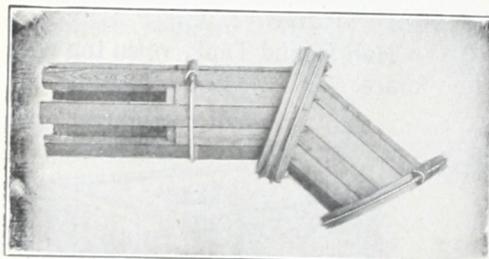


Half Round Tank with cover and man hole. These are also made with vertical sides and rounding bottoms.

Continuous Wood Stave Pipe

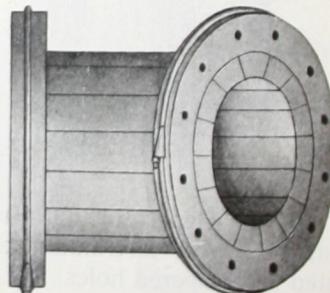


**Showing Detail, Below, of Splined Ends of Staves, and
Elbows, or Turns.**



Elbow showing connections, or wooden collars. These are strongly hooped and the flanges are fastened together with bolts.

End joints in staves are splined with galvanized steel spline for tight joints or in 3 inch stock, wooden splines can be used. These are made to give a driving fit and swell up with the staves, giving a tight joint. Joints or breaks in the staves are "staggered" or lapped past each other giving a strong continuous pipe.

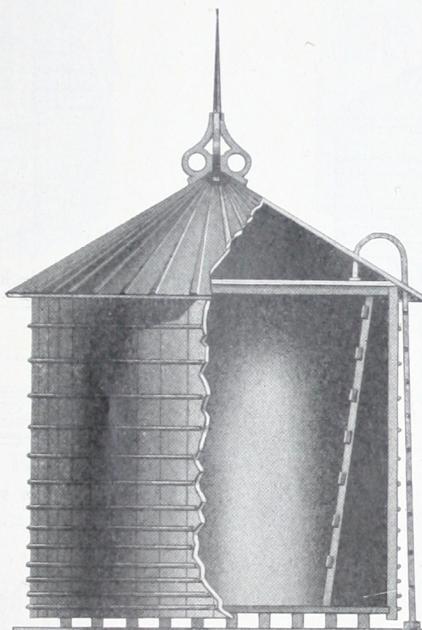


Gravity Tank with or without Tower

for

Fire Insurance or Sprinkler Systems

Built in accordance with the specifications of the Inspection Department of the Associated Factory Mutual Fire Insurance Companies.



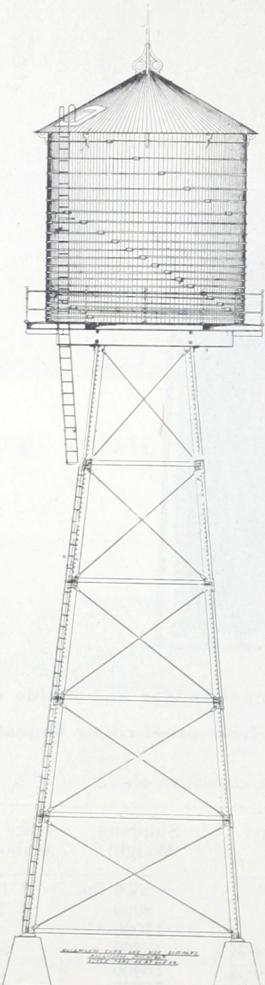
Showing Gravity Tank complete with outside steel ladder and inside of wood, conical board roof and double flat cover, or frost proof cover beneath.

Following table gives standard sizes, capacities, etc.

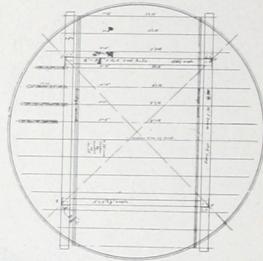
Gallons	Outside Diameter Ft. In.	Length of Stave	No. Round Hoops	Shipping Weight	Price complete as shown above
5000	10' 5"	12'	11-3/4"	5500 lbs.	\$ 160 00
10000	13' 8"	12'	11-3/4	8000	280 00
15000	15' 0"	14'	14-3/4	11000	550 00
20000	16' 0"	16'	5-3/4" & 11-7/8"	13500	575 00
25000	18' 0"	16'	4-3/4 12-7/8	16400	760 00
30000	18' 5"	18'	4-3/4 16-7/8	18000	900 00
40000	20' 0"	20'	6-7/8 17-1	22000	1175 00
50000	22' 5"	20'	4-7/8 19-1	26500	1400 00
60000	24' 5"	20'	3-7/8 20-1	31000	1640 00
75000	24' 6"	24'	10-1 21-1 1/8	36500	2025 00
100000	28' 6"	24'	5-1 29-1 1/8	45500	2600 00

Elevated Tanks and Towers

Suitable for
Farm, Suburban or Village Uses



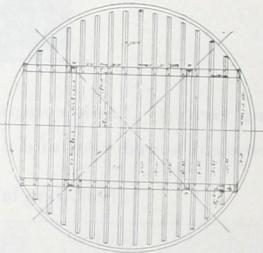
Type of Tower and Tank showing ladder from ground to deck and top of tank. Extended deck or walkway with double railing, part of regular equipment.



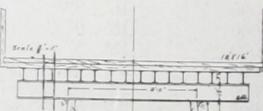
Plan of wood deck showing stringers carried on two I-beams.



Wood floor system or dunnage.

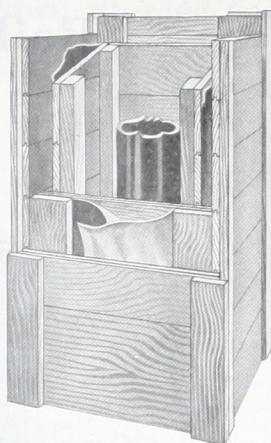
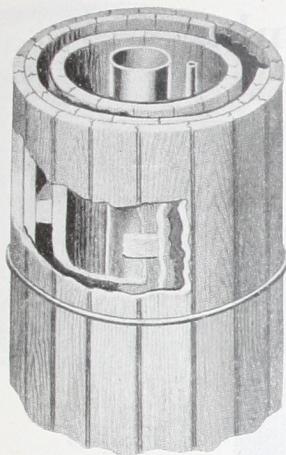


Steel I beams for supporting tank bottom. Carried on two large girders.



Steel floor system. I beams for dunnage.

Frost Proofing for Pipes



Showing Above Both Round and Square
Construction

This protection must be used on Tanks carried on towers or elevated above buildings. This is built to protect the riser pipes from freezing, and in extremely cold weather be sure to keep water circulating unless heating or steam pipes are also enclosed in the boxing.

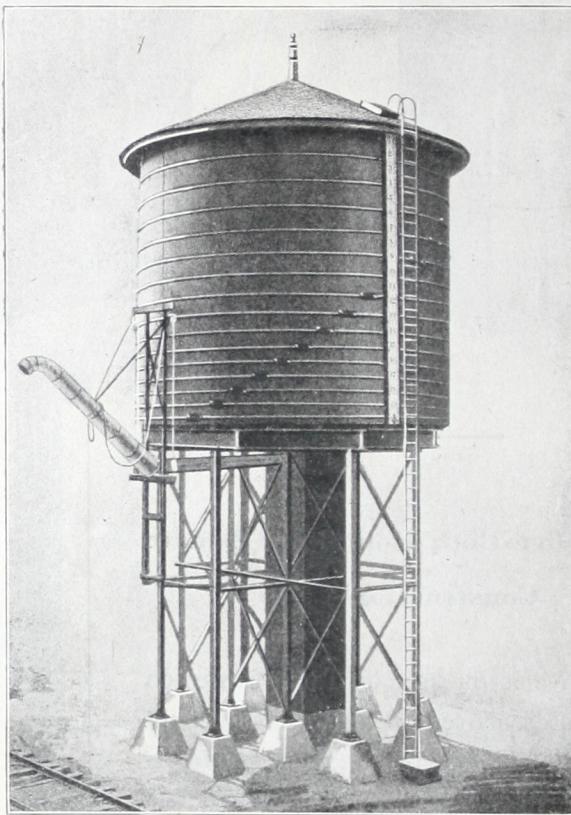
The amount of protection necessary depends, of course on the location, severity of the winter, frequency of circulation and amount of heat supplied.

Both of above types are used extensively and it is merely a matter of choice or looks as to which might be required.



Indicator
and
Float
for
Register-
ing
Amount
of
Water
in
Elevated
Tanks

Railroad Tanks



Elevated storage tanks for Railroads or Industrial Companies having their own system of tracks. Complete with fixtures, spout, etc.

Send us specifications or Blue Print for our estimates.

GALVANIZED STEEL TANKS

Knocked Down Storage Tanks



No.	Diameter Feet	Height Feet	Capacity Gallons	Weight Pounds	List Price
10	6	6	1200	326	\$ 40.00
11	6	8	1600	403	49.00
12	8	5	1800	410	50.00
13	8	6	2133	465	56.00
14	8	8	2854	550	72.00
15	8	10	3592	670	81.00
16	10	8	4580	750	95.00
17	10	10	5680	877	110.00

All knocked down tanks are set up at our factory in order that every part may fit perfectly. Before knocking it down to crate, all parts are marked plainly, showing just where they belong. Every iron is bent to a proper circle and punched for rivets. Sufficient solder and rivets accompany each tank to complete it.

Prices on special sizes quoted on application.

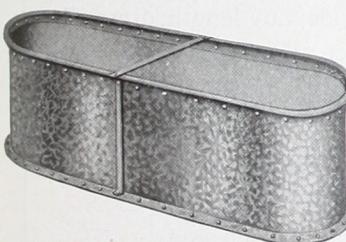
State gauge of steel required for your tanks. Weights and prices as given above are based on No. 20 metal.

For No. 18 steel add 30 per cent to list; No. 16, add 60 per cent.

Small Galvanized Steel Tanks Set Up

The following sizes are shipped set up ready for use

Prices on special sizes quoted on application. All prices are based on tanks as made of No. 20 galvanized steel. If No. 18 metal is wanted add 20 per cent, if No. 16 is wanted add 40 per cent to list price.



No.	Width Feet	Height Feet	Length Feet	Capacity Barrels	Weight Pounds	List Price
401	2	2	4	3½	63	\$ 7.00
403	2	2	6	5½	89	10.25
405	2	2	8	7½	120	12.25
406	2	2	10	9½	135	15.00
408	2½	2	8	9½	128	13.00
410	2½	2½	8	12	140	15.00
411	3	2	8	11½	133	14.00
412	3	2	10	14	165	17.50
413	3	2½	8	14	150	16.00
415	3	3	10	21	190	23.75
416	4	2	8	15	160	18.00
417	4	2	10	19	190	21.50
418	4	2	12	22	220	25.75
421	4	2½	8	17	165	20.00
425	4	3	10	29	235	28.50
428	5	2½	16	47	400	45.00
429	6	2	8	23½	190	23.00
433	6	2½	10	35½	275	29.50

No.	Diameter Feet	Height Feet	Capacity Barrels	Weight Pounds	List Price
301	3	2	3½	65	\$ 8.00
302	4	2	6	90	9.50
303	4	2½	7	100	10.75
304	4	3	9	115	12.75
305	4	4	12	130	16.00
306	4	5	14	165	19.00
307	4	6	18	190	23.75
308	4	8	25	225	26.00
309	5	2	9½	115	13.00
310	5	2½	12	130	14.50
311	5	3	14	140	15.50
312	5	4	19	170	21.00
313	5	5	24	200	23.75
314	5	6	28	230	28.00
317	6	2	14	150	16.00
318	6	2½	17	160	17.50
319	6	3	20	180	20.00
320	6	4	27	210	25.00
321	6	5	34	240	30.00



Paper and Pulp Mills

Requiring

Blow Pits, Acid Storage Tanks, Wood Pipe, Etc.

FOR years we have enjoyed an excellent trade from the Paper and Pulp Mills throughout the eastern states, as well as Minnesota, Wisconsin and Michigan. Much of the business is in the nature of repeat orders covering either replacements or new equipment from mills that we have served in years gone by. Such orders are especially gratifying as they indicate that our service in the past has been satisfactory.

You will perhaps be interested in knowing that we have a completely equipped department for making all kinds of tanks used in the paper trade. We recently installed a special machine for handling exceptionally large tanks, such as blow pits, acid tanks, etc. This machine will handle stock 12 inches thick; 30 inches wide; any length; dress all four sides; tongue, groove and bevel each piece all at one operation, thereby insuring perfect joints and a uniform thickness of each piece in the finished tank.

As this catalog goes to press we have going through our factory orders for the following tanks:

- (4) 24 ft. diameter by 24 ft. stave, head in each end.
- (4) 28 ft. diameter by 26 ft. stave, head in each end.
- 32 ft. diameter by 22 ft. stave, head in each end.
- (2) 16 ft. diameter by 26 ft. stave, head in each end.

The above being made of 6 inch Long Leaf Yellow Pine.

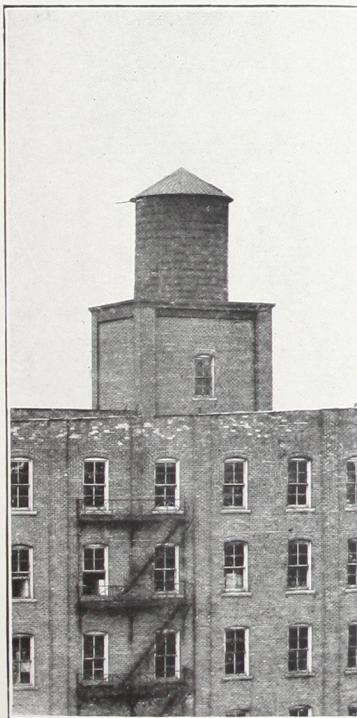
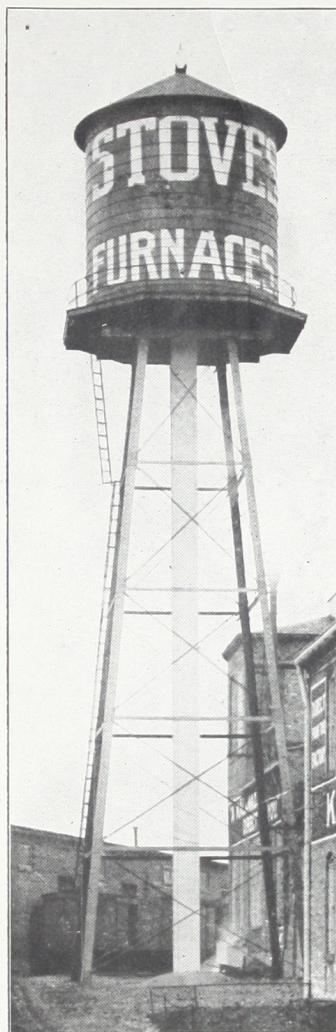
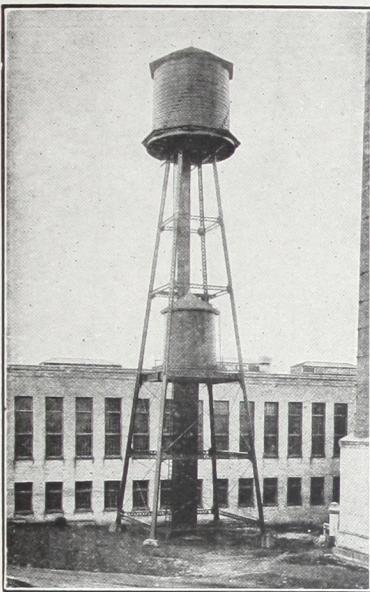
- (2) 36 ft. diameter by 18 ft. stave head in each end.

These Tanks being made of 8 inch Long Leaf Yellow Pine.

We mention these few in particular merely to illustrate that we are in shape to handle the largest Tanks required.

We always carry a good stock of 2 inch and 3 inch clear Louisiana Red Cypress as well as clear Washington Fir, and usually can give you prompt shipment on your Tank requirements.

Send us your specifications for any kind of Tank work.



**Showing Different Types
of Construction.**

**We Can Fit Any Re-
quirement.**

KALAMAZOO TANK & SILO CO.
KALAMAZOO, MICHIGAN

